CHILD CARE USE AND SATISFACTION AMONG MILITARY FAMILIES WITH PRESCHOOL CHILDREN

Technical Report	
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by Shelley M. MacDermid Rachelle Strauss Natashia Robbins Heather Wenz	
Yuhsuan Chang Rona Schwarz Howard Weiss with Susan Kontos	





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MILITARY FAMILY RESEARCH INSTITUTE at PURDUE UNIVERSITY

14 N. Second St., Ste. 300 Lafayette, IN 47901 Tel: (765) 423-2266

Fax: (765) 423-4114

Website: www.mfri.purdue.edu

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SECTION 1

Executive Summary

Executive Summary

At the request of the Office of Military Community and Family Policy (MC&FP), this report examines the child care arrangements used by military families with children younger than 6. The primary data source was the 1999 Survey of Active Duty Personnel; surveys conducted by individual armed services and by civilian organizations also were consulted.

Child Care Arrangements: Overview

Most military families with children younger than age six (75%) use non-parental care at least some of the time, regardless of location, paygrade, or number of earners in the family. Most of these families use multiple forms of parental and/or non-parental care.

Categories of Use

Overall, 3 in 4 families (77%) reported using some form of parental or nonparental child care beyond the survey respondent. Of the families using care, 75% reported using non-parental care as their only or one of several arrangements, and 12% reported using BOTH parental and non-parental arrangements. An unexpectedly high proportion of parents (24%) reported using no child care at all, which may reflect under-reporting of care provided by parents.

Specific Types of Arrangements

The single most popular arrangement, meaning that used by the largest percentage of families, was 'friends and neighbors,' reported by 38% of respondents on the Active Duty Survey.

This was followed by 'grandparents' (23%) and on-base Child Development Centers (CDCs – 21%). Popularity was defined by the number of families reporting use, not the frequency or duration of use. Families who paid for child care used almost all forms of care at higher rates than families who did not pay for care.

Intensity of Use

Data from the Army and the Air Force suggested that most children in care were in one or more child care arrangements for a total of at least 30 hours per week. Since most occasional or hourly arrangements (72%, according to Army data) lasted 2 hours or less per week, it seems that most primary child care arrangements were at least half-time and many were full-time.

Number of Child Care Arrangements

One-quarter of all families reported using no non-parental child care arrangements; slightly less than one-third used a single arrangement; and 45% used multiple arrangements.

Like civilians, military families with children younger than six who used nonparental care used an average of just under 2 child care arrangements per child at any one time.

Primary vs. Secondary Care Arrangements

Data from the Army suggested that primary care arrangements, meaning arrangements used for the largest number of hours, were mostly formal (e.g., CDC, preschool) while secondary care arrangements were primarily informal (e.g., friends, neighbors and relatives). Centers, friends and neighbors, however, played important roles in both primary AND secondary care arrangements.

Combinations of Care Arrangements

Military parents of children younger than age six often used multiple forms of child care. Overall, the combinations of care arrangements reported by the most families involved friends, neighbors, grandparents, and sitters/nannies. This finding is based solely on the number of families who report using particular types of care and contains no information about intensity of use.

The arrangements most likely to be reported in combination with military CDCs were friends and neighbors, and grandparents. This finding is based solely on the number of families who reported using particular types of care and contains no information about intensity of use.

The arrangements most likely to be reported in combination with on-base Family Child Care (FCC) were friends and neighbors, and military CDCs. This finding is based solely on the number of families who report using particular types of care and contains no information about intensity of use.

Changes in Child Care Arrangements

Across paygrades, between 41 and 50% of military parents of children younger than age six reported changing child care arrangements in the past year, compared to 32% of civilians. Cost was the primary reason among members in paygrades E3, E4, and E5; in higher paygrades the primary reasons included changes in military assignments, changes in children's school enrollment (i.e., entering elementary school), and the availability or hours of the care provider.

Reasons for changing child care arrangements differed across the types of child care routinely used. For example, cost was most frequently cited by those who recently used or are now using on-base CDCs, but least frequently cited by those using off-base family child care.

Among those using informal child care arrangements (friends, neighbors, relatives, sitters) or off- base family child care, the most common reasons for changing were the accessibility, reliability, or availability of the care provider.

Among those using off-base centers or FCC, the most common reason for changing was quality of care.

Child Care Arrangements During Deployment
Families who experienced longer or more
frequent separations were more likely to
report relying on informal (e.g., grandparents,
friends, and neighbors) and/or nonmilitary
(e.g., off-base child care centers) forms of care.

Variations in Care Arrangements

Variations by Military Status
Compared to civilian families, military
families were:

- a) more than three times as likely to use a daycare center
- b) more than twice as likely to use care provided in the child's home by a sitter or nanny or a family care provider

Most comparison data deal with dual-earner families. The top arrangements used by dual-earner military families were: on- and off-base daycare centers (48%), friends and neighbors (45%), and grandparents (30%). The top arrangements used by dual-earner civilian families in the general population were grandparents (30%), the other parent (18%), and daycare centers (15%).

Variations by Duty Location

The top (i.e., most-used) child care arrangement types did not differ between CONUS (Continental U.S.) and OCONUS (Outside Continental U.S.) families. In both cases, the top five forms of care were friends and neighbors, grandparents, military CDCs, sitters and nannies, and the child's other parent.

Some differences between CONUS and OCONUS families were evident. For example, compared to OCONUS families, CONUS families were:

- a) more than twice as likely to use 'off-base daycare centers,' 'other relatives' and 'off-base preschools'
- b) almost twice as likely to use 'grandparents' and 'off-base family care in a home setting'
- c) about half as likely to use 'on-base preschools' and 'on-base CDCs'

Variations by Paygrade

The most common types of child care arrangements were similar across paygrades. Friends or neighbors were most common, followed by grandparents. The third most common type of care was an on-base CDC for the lowest paygrades and a sitter/nanny/aupair for the highest paygrades. The number of arrangements per family tended to increase with paygrade, however, even when number of children was taken into account.

As paygrade increased, more families used more costly forms of care, such as sitters/nannies/aupairs or off-base preschools or centers. Use of friends and neighbors was also more prevalent among higher paygrades than lower paygrades.

Variations by Child Age

The use of no outside care arrangements was more popular for families with children under two than families with older children (2-6).

Group care settings, such as CDCs and preschool were more popular among families with children older than two, while families of infants relied primarily on informal forms of care such as friends, relatives, and sitters.

Variations by Earner Status

For single- and dual-earner families, the top child care arrangements were friends and neighbors, grandparents, and on-base CDCs.

Most (60%) single-earner CONUS families used some form of non-parental child care. Slightly less than one-half of single-earner families contained either a single parent, a spouse attending school, or a spouse who is looking for work.

Compared to single-earner families, dual-earner families were:

- a) more likely to use FCC
- b) more likely to use 'off-base day care centers' and 'off-base family day care.'

Variations by Housing Location

Military-housed families seemed to rely more heavily on friends and neighbors and on-base CDCs and less heavily on grandparents than their civilian-housed counterparts.

What do Military Parents of Preschoolers Spend on Child Care?

Overall

About 30% of military families with one or two children younger than six reported spending \$200 or less per month, or about \$50 per week. About 40% reported spending between \$200 and \$400 per month, or up to about \$100 per week, and about 20% of families reported spending over \$400 per month, up to \$800 or more.

A surprisingly high proportion of families (39.3%) reported paying nothing for child care, even though almost half of those families (43.4%) used care. Parents might have received care at no charge because they used only very small amounts of care, or because they received or exchanged care as a favor.

Expenditures by Type of Care

Families least likely to report paying for child care were those who relied on grandparents, other relatives, or friends and neighbors; percentages ranged from 24% (grandparents) to 46% (other relatives).

Families most likely to report paying for child care were those relying on home-based child care providers off base (97%), CDCs (91.5%), or FCCs (91.3%).

Military parents spent about the same amount on off-base care in centers and family child care homes; they tended to spend more for care in on-base FCCs than in CDCs.

Expenditures by Number of Children

Families with two children reported spending more on child care than families with one child, particularly when both parents were employed.

Child Care Expenditures by Paygrade

Overall, among single-earner families who paid for child care, officers tended to pay substantially less than enlisted personnel, probably because officers were more likely to have spouses who were homemakers. Among dualearner families, officers paid somewhat more.

Expenditures by Housing Status

Families living in civilian housing reported spending somewhat more on child care than families living in military housing. A future report will examine whether changes since 1999 in military compensation are likely to have alleviated this difference.

Expenditures by Earner Status

Families with two earners reported spending more on child care than families with one earner, irrespective of housing type and location.

Parents' Evaluations of Child Care

Military members were asked how satisfied they were with "acceptable and affordable" child care, terms that might hold many different meanings for military parents. For example, acceptable care might mean care that is offered during convenient hours, available in good supply, or of good quality. Affordable care might mean care that is available for what members feel they can pay, or what members feel they should pay. Parents' responses could pertain only to child care offered by the military or to child care in general.

Overall Satisfaction

According to the Active Duty Survey, between 35% (O3) and 57% (E4) of military parents of children younger than age six reported being dissatisfied or very dissatisfied with the acceptability and affordability of child care. There are no data to suggest whether such dissatisfaction centers on arrangements used in the past, current arrangements, or arrangements parents would prefer to use.

Surveys by the individual military services, however, revealed generally high satisfaction with child care overall; satisfaction is lowest for the cost of care.

Satisfaction by Type of Arrangement

Members who relied on care by CDCs and grandparents were least likely to report dissatisfaction and members who used off-base family child care were most likely to report dissatisfaction, although the variations in levels of dissatisfaction were small.

Concerns About Child Care Arrangements

In general, members in lower paygrades reported more concern with child care availability during PCS moves and family separations than members in higher paygrades.

In general, members in lower paygrades perceived changes in child care arrangements as more disruptive of military duties than members in higher paygrades.

Satisfaction by Characteristics of Military Members Overall, enlisted and OCONUS members appeared to be somewhat more dissatisfied than officers and CONUS members with the acceptability and affordability of child care. Members appear to report less dissatisfaction when they have one or more of the following characteristics: a member of the Navy, college-educated, Black non-Hispanic, Hispanic, or do not hold a second job.

Satisfaction by Characteristics of Military Families Members reported more dissatisfaction when they are more financially strained and have two children—as opposed to one child—under the age of six.

No consistent relationships were observed between levels of satisfaction and the number of earners in the family, housing location (on- or off-base), or number of child care arrangements used. Families in paygrades E3 and E4, however, were the least likely to be satisfied with child care acceptability/affordability and to experience – willingly or unwillingly – a variety of challenging life circumstances, including single motherhood and very young children.

Attitudes Related to Evaluations of Child Care

Dissatisfaction was more common among members who strongly agreed that benefits had eroded and members who lived off base but believed that living on base would help make ends meet.

Dissatisfaction was less common among members who reported that they were very likely to stay in the military or that their spouses strongly favored staying, or who were very satisfied with military life.

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SECTION 2

Introduction

According to the website of the Office of Military Children and Youth, the "military child development system provides services for the largest number of children on a daily basis of any employer in the United States. Military child care is provided in 800 centers in over 300 geographic locations, both within and outside of the continental U.S." (www.military-childrenandyouth. calib. com/mm_cdc.htm). The system serves over 200,000 children in CDCs, FCCs, school-age care, and supplemental/resource and referral programs.

The military child development system has undergone radical change in the past 15 years. The Military Child Care Act of 1989 has been instrumental in transforming the system from one marred by safety concerns to one lauded as a model for the nation (Campbell, Appelbaum, Martinson, & Martin, 2000). Over 90% of military child development centers have been accredited by the National Association for the Education of Young Children, compared to 8% of all child care centers in the U.S. (Campbell et al., 2000).

At the request of the Office of Military Community and Family Policy, this report examines the child care arrangements used by military families with children younger than 6, and a variety of aspects of parents' experiences with child care.

Data Sources and Methods

Analyses for this report were conducted using data from the 1999 Survey of Active Duty Personnel administered to military members by the Defense Manpower Data Center. These data were released early in 2001. Where appropriate, we also consulted the results of surveys conducted by individual military services and civilian organizations.

The Survey of Active Duty Personnel was distributed to 66,040 military members in

the Army, Navy, Air Force, and Marine Corps. Reservists on active duty were included in the sample, but flag and general officers were excluded because their small numbers made it difficult to ensure confidentiality. Of those invited to participate, 33,189 were eligible and did so; 29,940 declined. The weighted response rate was 50.7% (Wright, Williams, & Willis, 2000). The selection of the sample was "non-proportional, stratified, single-stage, and random" (Wright et al., 2000, p. 4). In other words, all sample members were selected at random, but the proportions selected from various groups were adjusted to ensure adequate representation of members of small groups. The specific groups or strata were defined by service branch, gender, paygrade, location (CONUS, OCONUS; Please see Appendix A for a glossary of acronyms), and joint marital status (unmarried, married to civilian, married to military member).

The survey asked members questions about their military assignment and living information, their military career and aspirations, their satisfaction with military life and compensation, and information about their family life and financial well-being. Several items dealt specifically with child care arrangements and parents' evaluations of them.

Families were selected for the present study if they had one or two children younger than six living regularly with them. Families were divided into groups based on paygrade and location (i.e., stationed in or outside the continental U.S.). Because of their small numbers, families in paygrades E1, E2, and O1 had to be excluded. Overall, information from 3,022 military families was used. Of these, 2,526 were located within the continental U.S. (i.e., CONUS) and 496 were located outside (i.e., OCONUS).

Characteristics of the Families

The 3,022 families included in this study are representative of approximately 165,895 active duty families with either one or two children younger than 6. Military services and paygrades were represented as follows:

- Army (35%), Navy (24%), Air Force (28%) and Marines (11%);
- E3 (12%), E4 (32%), E5 (31%), E6 (14%), O2 (2%), and O3 (9%).

Most respondents were male (86%), and most (86%) were stationed in the U.S. or its territories. Slightly less than one-third (31%) of the respondents were in their first tour of duty; more than half (56%) were in their second. More than one-third (39%) of the respondents had been in the military 4 years or less; 44% had served between 5 and 10 years. Most respondents were white and not Hispanic (63%), 12% were Hispanic, 15% were non-Hispanic black or African American, and 10% were non-Hispanic of other or multiple ethnic backgrounds. For slightly more than 1 in 4 respondents (26%), a high school diploma or GED was the highest level of education they had obtained; 60% of the respondents had at least some college, and 15% – mostly officers had earned a Bachelors degree or beyond.

Almost all of the respondents (93%) were married, 80% for the first time, and approximately 10% of the respondents were in joint-service marriages. More than two-thirds (69%) of the respondents had one child; 31% had two. Most respondents (59%) had at least one child between 2 and 5 years of age; 30% had at least one child between 1 and 2; and 35% had a child younger than 1 year of age. About 6% of these respondents reported that at least one of their children had special needs.

In terms of their jobs, 38% of the military members reported working between 41 and 50 hours per week, 27% reported working between 51 and 60 hours per week, and 19% reported working more than 60 hours per week. In addition, 13% of the members reported having a second job or a home-based business, which in most cases occupied them for 11 to 30 hours per week. Fewer than 11% reported working 40 hours or less each week. Most members reported that their spouses were employed in one or more of the following ways: serving on active duty or in the guard or reserve (13%), civilian employment on (22%) or off the base (11%), or employment in a family- or home-based business (5%).

In sum, military parents of children younger than six are relatively young themselves, mostly in paygrades E4 and E5, and mostly in their second tour of duty. The military members in these families are relatively well-educated, with most having at least some college. In about half the marriages, both spouses are employed, and about 1 in 5 members reported heavy work hours exceeding 60 hours per week. Given that most families have one child and that most children are between 2 and 5, it is likely that many families will have a second child within a few years.

Findings in this report are typically reported in the form of descriptive statistics such as means or frequencies. In general, differences were not tested for statistical significance. All reported percentages are based on weighted data that represent the entire population of military families at these paygrades and locations, who have preschool children. Unless otherwise noted, all reported percentages are based on the number of members who responded to the item as opposed to all military members in the survey.

We considered the following specific aspects of parents' child care arrangements:

Overall patterns of use, including:

- a) Use of categories of care;
- b) Popularity of specific types of care;
- c) Intensity of use;
- d) Number of child care arrangements;
- e) Primary vs. secondary care arrangements;
- f) Combinations of care arrangements;
- g) Changes in child care arrangements; and
- h) Care arrangements during deployment.

Variations in arrangements related to:

- a) Military status (military vs. civilian families)
- b) Duty Location (CONUS vs. OCONUS)
- c) Paygrade
- d) Child age
- e) Number of earners in the family
- f) Housing location

Parents' expenditures for child care

- a) Expenditures by type of care
- b) Expenditures by paygrade and family type

Parents' satisfaction and concerns related to child care and military benefits

- a) Satisfaction
- b) Satisfaction by type of arrangement (CONUS families)
- c) Concerns with child care arrangements (CONUS families)
- d) Child care satisfaction and characteristics of military members (CONUS families)
- e) Child care satisfaction and characteristics of military families (CONUS families)
- f) Attitudes potentially related to evaluations of child care

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SECTION 3

What Child Care
Arrangements do
Military Parents of
Preschoolers Use?

What Child Care Arrangements do Military Parents of Preschoolers Use?

Much of the information regarding child care use in this report comes from a single item on the 1999 Survey of Active Duty Personnel. Although the item yields a great deal of valuable information, it also has limitations that readers must keep in mind. The exact wording follows:

During the past 12 months, have you routinely used any of the following child care arrangements? (MARK ALL THAT APPLY.)					
☐ Not applicable, I have not used any of the following					
child care arrangements (Go to question 68)	☐ Off-base preschool				
☐ Child's other parent or stepparent	☐ CDC on-base				
☐ Child's brother or sister aged 15 or older	☐ Child care center/daycare center off-base				
☐ Child's brother or sister under the age of 15	☐ Family Child care Home on-base				
☐ Child's grandparents	\square Child care provider in a home setting off-base				
☐ Other relative	☐ School-Age Care Program on-base				
☐ Friend or neighbor	☐ After-school program off-base				
☐ Sitter, nanny, or au pair	☐ Federally supported Head Start program				
☐ On-base preschool	☐ None of the above				

The major limitation of this item is that it provides no information about the number of hours any particular care arrangement is used, only the number of families who use it. Thus, the item is an index of the popularity of particular child care options, not the intensity of their use. The item also provides no information about which care arrangements are used for particular children in families with multiple children.

A major strength of the item is the breadth of the child care arrangements it includes. Both formal arrangements such as CDCs and preschools, and informal arrangements such as friends, neighbors and relatives are included. In addition, care offered by both military and non-military sources is included.

Child Care Arrangements: Overview

Categories of Use

We began by grouping child care arrangements into four general categories based on use of parental and/or non-parental forms of care (see Table 1). With the exception of the "Does not use child care" category, the categories are not mutually exclusive (i.e., members can appear in more than one category).

Overall, 3 in 4 families (77%) reported using some form of child care beyond the parent responding to the question. Of the families using some form of care, 75% reported using non-parental care as their only or one of several arrangements, and 12% reported using BOTH parental and non-parental arrangements.

An unexpectedly high proportion of parents (24%) reported using no child care at all – even by another parent. An additional 16% reported using child care but not paying for it; 60% both used and paid for care. Among the members who reported using no child care, most (58%) had spouses who were not employed, 18% had spouses who worked full-time, 5% had spouses who worked parttime, 11% had spouses who were unemployed, and 4% had spouses who were students; 3% did not have a spouse. Most of these members were enlisted: 18% E-3, 34% E-4 and 25% E-5. Almost half of these parents (47%) had children under one year old.

If 1 in 4 military parents on active duty truly were caring for their children with no help at all, even from another parent, we would be concerned about their ability to provide adequate care, maintain their own physical and psychological well-being, and meet the demands of military life. We suspect, however, that respondents on the Active Duty Survey underreported their reliance on parents for provision of care. Some parents may equate child care with purchased care; others equate it with care by someone other than a mother or father.

Parents who adhered to these definitions may have reported that they used no care, leading to under-reports on the Active Duty Survey. This conclusion is supported by data from the Survey of Army Families IV (SAF IV), conducted during 2001 with 6,759 civilian spouses of military members. Among respondents with children under 12, 10% reported they did not have children younger than 5 and/or did not

use child care for them. This rate of non-use of childcare is about half the rate reported in the Active Duty Survey. Thus, readers should assume when reading this report that there are many parents who provide care for their children who did not get "credit" for doing so in responses to the Active Duty Survey.

Overall, 56% of the parents paid for some or all of their childcare. Two-thirds (65%) of those using a single child care arrangement and 77% of those using multiple care arrangements paid for care.

Perhaps the most important information to take away from Table 1 is the heavy reliance by military families on non-parental care (used by 75% of families, according to the 1999 ADS). Clearly, child care is an important issue for military families with preschool children.

Table 1. Overall Use of Parental and Non-Parental Child Care Arrangements

Does not use child care ¹	23.5
Uses parental care ²	13.9
Uses non-parental care ³	74.7
Uses both parental and non-parental care ⁴	12.1

 $[\]underline{N} = 2,526$ CONUS and 496 OCONUS families

¹Includes all members who marked, "Not applicable, I have not used any of the following child care arrangements," and/or "None of the above (child care arrangements)" in the 1999 Survey of Active Duty Personnel.

²Includes all members who marked, "Child's other parent or stepparent" as their only, or one of several, child care arrangements.

³Includes all members who marked a non-parental care arrangement as their only, or one of several, child care arrangements.

⁴Includes all members who marked "Child's other parent or stepparent" AND at least one nonparental care arrangement.

Table 2. Overall Use of Specific Child Care Arrangements

Arrangement Type	% Who Use, Overall	% Who Use, Parents Who Pay For Some Care	% Who Use, Parents Who Don't Pay For Any Care
Don't use child care	23.5%	0%	23.5%
Child's other parent/stepparent	13.8	8.9	4.9
Brother or sister aged 15 or older	0.6	0.3	0.2
Brother or sister under age 15	0.2	0.2	0.0
Grandparent	23.3	26.4	19.3
Other relatives	12.7	14.4	10.5
Friend/Neighbor	37.6	48.3	23.9
Sitter, nanny, or aupair	17.7	28.0	4.4
Preschool (on base)	6.1	9.3	1.9
Preschool (off base)	9.4	14.4	3.1
Child Development Center (on-base)	21.1	33.7	4.9
Child center/daycare center (off-base)	12.1	19.2	2.8
Family child care home (on-base)	8.6	13.8	1.8
Provider in a home setting (off-base)	8.6	14.1	1.5
Federal program such as Head Start	1.2	2.1	0.0

N=2,526 CONUS and 496 OCONUS families.

The rows of the table are not mutually exclusive; families who use multiple forms of care appear in multiples rows.

Popularity of Specific Child Care Arrangements
Table 2 presents details about the popularity of specific child care arrangements. As with Table 1, the categories are not mutually exclusive — military members who used multiple child care arrangements appear in multiple rows of the table. Popularity is defined in terms of the percentage of families who rely on particular

forms of care, not the intensity of their use.

Two results are notable in Table 2. First, military families reported relying heavily on arrangements where children receive care in groups, particularly center-based care. One in three families of preschoolers reported using either an on-base CDC (21.2%) or off-base child care center (12.1%). These high rates of use are a testament to the success of the military child care system in educating parents about the high quality of care that is possible in child care centers. Regrettably, high quality is unevenly available – over 90% of military CDCs but less than 10% of civilian child care centers meet rigorous national standards for accreditation.

The second notable finding was the unexpectedly high popularity of relatives, friends and neighbors as sources of care. In part, this finding was unexpected because most previous military surveys have not sought information about care by (especially) friends. An immediate question is whether care provided by friends, neighbors and relatives is or should be a substitute for care provided in formal settings such as CDCs and FCCs. Since both care in CDCs and care by friends, neighbors and relatives were extremely popular, however, it seems unlikely that one substitutes for the other. We surmise, and data we present later support, that most families who use care rely on formal arrangements (i.e., centers) as their primary source of care, and on informal care (i.e., provided by friends, neighbors and relatives) for occasional or backup care. Nonetheless, friends, neighbors and relatives were important sources of both primary and occasional care.

Intensity of Use

Since the Active Duty Survey did not include such items, we also looked to data from individual military services to see if we could find any clues about the intensity – the frequency and duration -- of use of particular care arrangements. In the 1999-2000 Air Force Community Needs Assessment Survey, the 58,732 members and spouses who responded reported that the most popular child care arrangements for children under 2 were military CDCs or preschools (32%) and nannies or babysitters (22%). Most of the children in this age group (67%) were in care for full-time or close to it (i.e., more than 30 hours per week) and 15% were in care for 10 hours or less per week.

For children aged 3 to 5, the most popular child care arrangement was the military CDC or preschool (31%), followed by a civilian CDC or preschool (28%). Just over half of children in this age group (52%) were in care for more than 30 hours per week, and 20% were in care for a total of 10 hours or less per week, for a slightly lower intensity of use than for younger children. During the past month, 24% of the respondents to this survey reported needing more than 10 hours per day of care for 1 to 7 days – this rate was higher among single-parent and dual-military families and lower in families with a civilian spouse.

The SAF IV also asked respondents specifically how many hours each week on average they used occasional or hourly care. One in five respondents (22%) with children aged 0-5 reported using none at all. Over half (50.5%) used occasional care for 2 hours or less per week; one in five (21.2%) used occasional care for 10 or more hours per week (Peterson, 2001).

Together, these data from the Army and the Air Force suggest that most children are in care for a total of at least 30 hours per week (across all their child care arrangements).

Since most occasional or hourly arrangements (according to Army data) last only about 2 hours or less per week, it seems that most primary child care arrangements are at least half-time and many are full-time.

Number of Child Care Arrangements

The finding that most Army families report using both usual and occasional child care arrangements leads us to ask how many child care arrangements most families use. Table 3 summarizes this information specifically with regard to non-parental arrangements. One-quarter of families reported using no non-parental arrangements; slightly less than one-third used a single arrangement; and 45% used multiple arrangements.

Families who used at least one type of child care arrangement, excluding parental care, used an average of 1.8 child care arrangements per child. This is just slightly less than the level of use by civilian families with a child under the age of five who use at least one type of regular care arrangement: an average of 2.0 arrangements per child (U.S. Census Bureau, 1995). In total for all their preschool children, military families used an average of 2.3 child

Table 3. Number of Non-Parental Child Care Arrangements Used by Military Families

Number of Arrangements	Total Sample	Parents Who Pay	Parents Who Don't Pay
	N=3,022	N=1,833	N=1,189
*Average per child	1.8	1.9	1.5
*Average per family	2.2	2.3	1.8
0	25.0%	0.9%	56.1%
1	29.3	34.9	22.1
2	21.0	27.3	13.0
3	13.7	19.9	5.7
4	6.4	2.3	9.6
5	2.9	4.9	0.3
6 or more	1.5	1.5	0

^{*}Averages exclude families who use no non-parental child care.

care arrangements including parental care; and 2.2 child care arrangements other than parental care. Families who did not pay for care used fewer arrangements, while families who do pay use a slightly larger number of arrangements.

Overall, military families may use slightly fewer arrangements at any given time than civilian families. This result suggests that infants and young children living in military families—with the exception of some officer families—may experience slightly more consistency in their caregiving environments than civilian families. Table 4 summarizes the popularity of specific care options among parents who use single and multiple arrangements.

As with the sample as a whole, the most popular arrangement among families who relied on a single arrangement was friends and neighbors. In contrast to families overall, CDCs and not

grandparents were the second-most popular arrangement, followed by off-base child care centers. Despite differences in rank order, however, families who used a single form of care were about as likely as families in the overall sample to use military CDCs. Grandparents were the fourth-most popular form of care among families who used a single form of care. Sitters, nannies and aupairs were the fifth most popular form of care, but they were used at only about half the rate (13.9% for the full sample vs. 7.4% among families who used a single form of care).

Almost two thirds (63.9%) of the families who used multiple arrangements included friends and neighbors in their child care "mix," and slightly less than half (43%) included grandparents. About a third of the families who used multiple arrangements included sitters or CDCs among them. Less than a quarter of the families who used multiple arrangements used siblings, preschools, family child care (on or off base), or off-base child care centers.

Table 4. Use of Specific Child Care Arrangements by Number of Arrangements

Arrangement Type	% Who Use Among Parents Overall	% of Those Using One Arrangement Who Use This Form of Care (paid or unpaid)	% of Those Using Multiple Arrangements Who Use This Form of Care (paid or unpaid)
Childs other parent/stepparent	13.8%	6.1%	25.1%
Brother or sister aged 15 or older	0.6	0.0	1.2
Brother or sister under age 15	0.2	0.0	0.3
Grandparent	23.3	9.0	43.0
Other relatives	12.7	2.4	24.8
Friend/Neighbor	37.6	24.0	63.9
Sitter, nanny, or aupair	17.7	7.4	32.4
Preschool (on base)	6.1	1.7	11.6
Preschool (off base)	9.4	4.8	16.8
Child Development Center (on-base)	21.1	19.8	32.2
Child center/daycare center (off-base)	12.1	10.4	18.9
Family child care home (on-base)	8.6	6.2	14.1
Provider in a home setting (off-base)	8.6	6.9	13.8
Federal program such as Head Start	0.6	1.0	1.3

N=2,526 CONUS and 496 OCONUS families.

Primary vs. Secondary Care Arrangements

Since the Active Duty Survey made no distinction between primary and secondary care arrangements, we looked to data from individual services for clarification. The SAF IV asked respondents about their primary arrangements: "Where is your child(ren) usually cared for during the day when you or your spouse are not available?" Respondents were asked separately about Army-operated/sponsored care and other arrangements. Secondary arrangements were covered with this question: "Where is your child(ren) occasionally (i.e., hourly) cared for when regular care, you, or your spouse are not available?"

CDCs were the most popular option for primary or "usual" care arrangements, reported by 55.4% of the respondents with children aged 0 - 5. The next-most popular Army-operated or sponsored option was the part-day preschool, used by 12.7% of the respondents. Only 8.1% of those who used child care for children aged 0-5 reported that they used only arrangements sponsored or operated by the Army; 91.9% reported also using other arrangements. Among those who reported using other arrangements, 47.4% relied on neighbors and friends as a form of "usual" care; the nextmost popular options were certified (17.4%) and noncertified (10.3%) babysitters, civilian child care centers (12.6%), and care in one's own home by an adult relative (8%).

The two most popular sources of secondary or hourly care were the same as for primary care, but in reverse order: 56.3% of Army spouses reported relying on neighbors and friends; the second most popular secondary arrangement was the Army CDC, reported by 30.2% of the respondents. Certified (18.1%) and noncertified (12.8%) babysitters, and care by relatives in one's own home (15.3%) were the other forms of care with double-digit popularity.

These data from the Army suggest that primary care arrangements were mostly formal (i.e., CDC, preschool) while secondary care arrangements were primarily informal (friends, neighbors and relatives). Both centers, and friends/neighbors played important roles, however in primary AND secondary forms of care.

Combinations of Care Arrangements

We next examined the most popular combinations of care arrangements, as shown in Figures 1, 2 and 3. As Figure 1 indicates, five of the top eight combinations overall included reliance on a friend or neighbor. The arrangements most likely to be used in combination with on-base CDCs (see Figure 2) were friends and neighbors (48.7%), grandparents (26.5%) and nannies or sitters (20.3%). The arrangements most likely to be used in combination with FCC (see Figure 3) were friends and neighbors (50.8%), CDCs (29.3%), and nannies or sitters (28.4%).

Changes in Child Care Arrangements

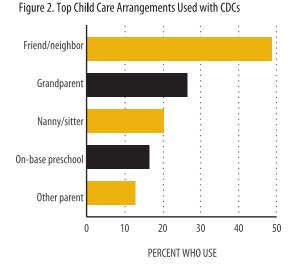
The 1999 Survey of Active Duty Personnel inquired about changes in child care arrangements. As another indicator of their evaluations of child care, we were interested in parents' reasons for changing. Parents were asked, "During the past 12 months, was there any change in your child care arrangements for your child or children?" Parents could respond, "Yes" or "No." For parents who responded, "Yes," a follow-up question asked, "For what reasons did the child care arrangements change? (MARK ALL THAT APPLY.)" The list of possible reasons is presented in Table 14. Between 41% and 50% of parents across all paygrades reported that their child care arrangements changed over the past year. In contrast, less than one-third (32%) of civilian parents of children younger than six had changed caregivers in the prior year, accord-

Grandparent & Friend/neighbor Nanny/sitter & Friend/neighbor Grandparent & Other relative CDC & Friend/neighbor Other parent & Friend/neighbor Other relative & Friend/neighbor Other parent & Grandparents Nanny/sitter & Grandparent 0 5 10 15 20 PERCENT WHO USE

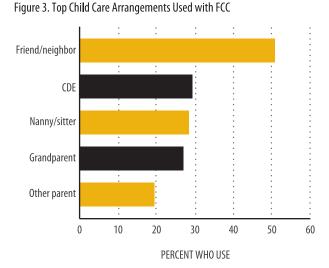
Figure 1. Most Common Combinations of Child Care Arrangements

Note. Data are weighted percentages of 2,005 families who use child care.

Percentages are based on the number of families overall that use both types of care arrangements and do not reflect the number of care hours used by families. Also, families who use 3 or more chilc care arrangements will be represented in multiple bars.



Note. Data are weighted percentages of the 504 CONUS families who use on-base CDCs and one or more additional care arrangements.



Note. Data are weighted percentages of the 207 CONUS families who use on-base FCC and one or more additional care arrangements.

ing to the 1992 National Study of the Changing Workforce (Galinsky, Bond, and Fredman 1993), a difference that is hardly surprising given the high mobility of military families.

Child care cost seemed to be a larger concern for lower-earning paygrades than for higherearning paygrades. As Table 5 shows, for the lower paygrades (E3, E4, and E5), the cost of child care was the most common reason why child care arrangements changed, followed by the availability or hours of the care provider. For higher paygrades (E6, O2, and O3), child care arrangements most commonly changed due to structural changes in a military assignment or a child's schooling. Reasons least likely to have caused changes – across all paygrades – included a change in assistance eligibility, the child outgrowing the arrangement, and the arrangement no longer being available.

Table 5. Reasons for Changes in Child Care Arrangements by Paygrade

Reasons for Changes in Child Care Arrangements	E 3	E4	E 5	E 6	02	О3
Percent of parents who reported a change in child care	50%	49%	49%	49%	41%	47%
Beginning, ending, or changes in child's school enrollment	20.0	16.3	23.6	36.3	26.2	33.5
Beginning, ending, or changes in military assignment	16.7	15.4	21.7	27.8	30.6	36.2
Beginning, ending, or changes, in spouse's school enrollment	0.0	8.2	5.8	3.4	10.7	3.8
Cost of child care	25.2	33.2	31.3	23.4	15.0	11.1
Availability or hours of care provider	23.6	26.3	23.3	22.2	22.8	20.9
Reliability of care provider	17.7	15.8	15.1	10.0	4.5	8.0
Quality of care provided	17.8	20.5	24.5	13.2	17.5	11.6
Care provider's location or accessibility	11.3	8.3	10.5	8.8	14.8	8.4
I never had any regular child care arrangements	19.8	14.5	4.6	6.6	11.8	3.9
Child outgrew arrangement	0.3	0.8	2.4	4.7	7.6	2.4
No longer eligible for assistance	0.0	0.0	0.0	0.6	0.0	0.0
Arrangement no longer available	7.8	8.3	10.7	8.9	12.7	7.4
Other	10.1	15.6	19.6	12.1	15.8	18.6

N=1,001 members who reported child care arrangements to have changed in the last 12 months; 52% of members across all paygrades reported no change in child care arrangements. 18% of the total sample (N=451) failed to indicate whether child care arrangements had changed.

Note. Members could choose more than one reason for changes in child care arrangements.

Note. Figures in gold indicate the most common reason for changes in child care for that column.

Care Arrangements During Deployment

As a final strategy for exploring the role of relatives, friends and neighbors in the provision of child care for military children aged 0-5, we checked data from the Active Duty Survey to see how the popularity of different child care arrangements varied as a function of the frequency and duration of members' time away from the permanent duty station. The results are shown in Figures 4 and 5.

Figure 4 plots the popularity of specific child care arrangements against the number of times members were away from the permanent duty station during the past year. Families who experienced more separations were more likely to rely on off-base child care centers and care by friends and neighbors, as well as care by grandparents and babysitters. In contrast, families who experienced more deployments were less likely to report using FCCs.

Figure 4. Child Care and Family Separation: Use of Particular Arrangements by Number of Times Away During the Past 12 Months

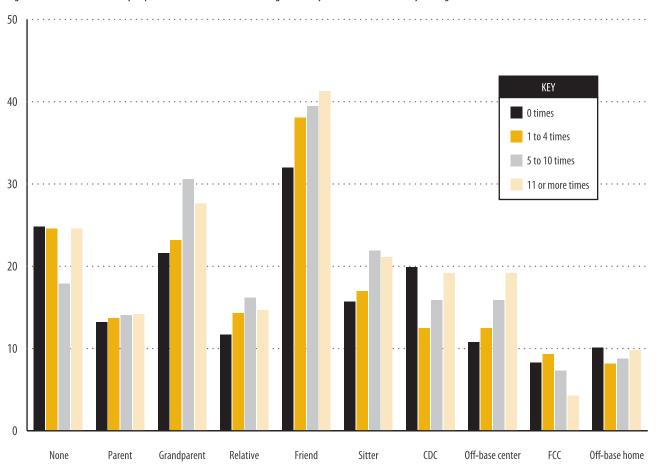


Figure 5 plots the popularity of specific child care arrangements against the total duration of separations. Families who experienced more nights of separation were more likely than other families to report using care by grandparents, and friends and neighbors, followed by babysitters and off-base child care centers.

Families who experienced more frequent or longer separations were more likely to report using informal (e.g., grandparents, friends, and neighbors) and/or nonmilitary (e.g., offbase child care centers) forms of care.

Variations in Care Arrangements

To understand patterns of child care use, we conducted a series of comparisons of the child care arrangements used by different groups of parents, based on military status, duty location, paygrade, child age, number of earners in the family, and housing location.

Child Care Arrangements as a Function of Military Status

Table 6a displays data about the child care arrangements used by both military and civilian families, separately for dual-earner and single-earner families. Unfortunately, the available databases do not lend themselves to easy comparison; they report estimates for different categories of care, sample from slightly different populations, and use data collected two to six years prior to the Active Duty Survey. Thus, caution should be taken when interpreting the estimates. Nonetheless, it is helpful to see what information on child care arrangements is available from the civilian population.

Figures highlighted in the table indicate that a care arrangement was among the top 5 in columns B or C, which show dual-earner military and civilian families respectively. Table 6b lists these forms of care in rank order by popularity. For comparison purposes, percentages of on-base and off-base forms of similar care are combined for military families.

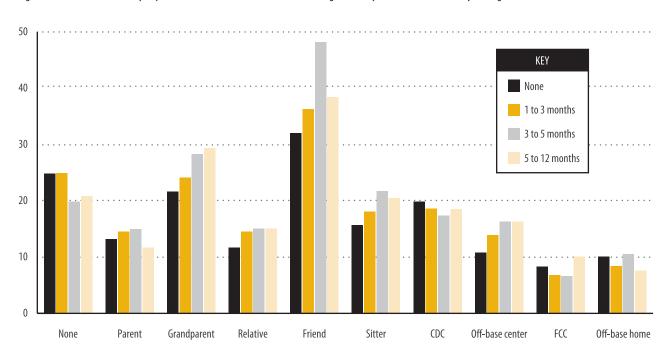


Figure 5. Child Care and Family Separation: Use of Particular Child Care Arrangements by Duration of Time Away During the Past 12 Months

Table 6a. Child Care Arrangements of Military and Civilian Families

	Percent of Families Receiving Care						
	Α	В	С	D	E	F	
	Military	Ailitary Under 6		Under 5	Civilian Under 3	Civilian Under 6	
Arrangement Type	Single-earner 1999¹	Dual-earner 1999²	Dual-earner³ 1993⁴	Employed mothers 1994 ⁵	Employed mothers 1997 ⁶	Single/ Dual 1995 ⁷	
Relative Care	na	na	50.1%	na	na	na	
Other parent or stepparent8	22.0%	16.3%	18.2	18.5%	27.0%	40.0%	
Non-Parental, Relative Care	na	na	na	na	27.0	21.0	
Sibling	1.5	0.7	1.9	na	na	na	
Grandparent	36.3	29.9	30.0	16.3	na	na	
Other relatives	18.9	17.6	14.5	9.0	na	na	
Non-Relative Care	na	na	48.5	na	na	na	
Organized facility	na	na	29.9	na	22.0	31.0	
Day care center	33.0	48.3	14.8	21.6	na	na	
On-base	23.0	25.9	na	na	na	na	
Off-base	10.0	22.4	na	na	na	na	
Nursery or preschool	22.9	19.0	13.5	7.8	na	na	
On-base	9.2	5.8	na	na	na	na	
Off-base	13.7	13.2	na	na	na	na	
Head Start	1.3	0.5	3.0	na	na	na	
Other non-relative care	na	na	28.8	na	na	18.0	
In child's home ⁹	19.8	24.2	9.1	5.1	7.0	na	
In provider's home	na	na	21.0	15.4	na	na	
Family day care	14.4	28.3	12.6	na	17.0	na	
On-base	7.4	12.8	na	na	na	na	
Off-base	7.0	15.5	na	na	na	na	
Other care arrangement ¹⁰	54.9	44.8	9.0	6.4	na	na	

na=No data available.

Note. Because of multiple arrangements, children may appear in more than one arrangement type; thus, the percentages may exceed 100%.

Note. Figures in gold indicate that a care arrangement was among the top 5 in columns B or C.

Data from single-earner military families who use at least one type of child care arrangement (N=843) are from the 1999 Survey of Active Duty Personnel. Includes all child care arrangements.

²Data from dual-earner military families who use at least one type of child care arrangement (N=1,162) are from the 1999 Survey of Active Duty Personnel. Includes all child care arrangements.
³Dual-earner families also include mothers who attend school but do not work for pay.

Data from dual-earner civilian families (N=19,281) are from U.S. Census Bureau, Survey of Income and Program Participation (SIPP), 1993 Panel, Wave 9. Includes all child care arrangements.

⁵U.S. Bureau of the Census, Fall 1994. Includes only primary child care arrangements.

⁶Urban Institute calculations from the 1997 National Survey of America's Families. Includes only primary child care arrangements.

⁷U.S. National Center for Education Statistics, Statistics in Brief, October 1995 (NCES 95-824). Includes only primary child care arrangements.

[®]For civilian families, "other parent" most likely refers to fathers as mothers were the targeted respondent. For military families, "other parent" most likely refers to mothers as 80.7% of military members who completed the child care questions were male.

⁹For military families, "In child's home" refers to care provided by sitters, nannies, or aupairs.

¹⁰For military families, "Other care arrangement" refers to care provided by friends and neighbors.

Table 6b. Most Popular Child Care Arrangements by Military Status

Dual-Earner Military Families	Dual-Earner Civilian Families
1. Daycare center, on- and off-base* (48.3%)	1. Grandparents (30.0%)
2. Friends and neighbors (44.8%)	2. Other parent (18.2%)
3. Grandparents (29.9%)	3. Daycare center (14.8%)
4. Family care, on- and off-base (28.3%)	4. Other relatives (14.5%)
5. Sitter/nanny/aupair (24.2%)	5. Nursery or preschool (13.5%)

^{*}For comparison to civilian families, on- and off-base daycare percentages are combined, resulting in a slight change in the top forms of care for dual-earner military families from those listed previously.

Dual-earner military families appeared more likely to use non-relative care than civilian families. Compared to civilian families, military families were:

- more than three times as likely to use a daycare center
- more than twice as likely to use care provided in the child's home by a sitter or nanny or a family care provider

On the other hand, levels of reliance on care by the child's other parent, grandparents, and other relatives were similar between these populations.

Child Care Arrangements as a Function of Paygrade and Duty Location

The popularity of each category of care by paygrade and duty location is summarized in Table 7.

For CONUS families, the two lowest paygrades (E3 and E4) were least likely to use non-parental care and, for E4 only, the most likely to use parental care. These lower paygrades also were more likely than higher paygrades to report not using any form of child care. For OCONUS families, the pattern is less clear but fewer families with members in the lowest paygrade (E3) reported using non-parental care whereas more families in the highest paygrade (O3) used non-parental care arrangements.

Table 7. Categories of Child Care Arrangement Use by Military Families

Category	E-3	E-4	E-5	E-6	0-2	0-3	Overall
CONUS	N=151	N=443	N=667	N=371	N=145	N=749	N=2526
Does not use child care ¹	33.6%	25.4%	19.2%	21.8%	24.1%	21.4%	23.6%
Uses parental care ²	10.5	16.4	15.1	11.7	12.0	13.3	14.2
Uses non-parental care ³	64.5	70.7	79.4	78.0	75.9	77.6	74.4
Uses both parental & non-parental care ⁴	9.6	12.4	13.9	11.2	10.5	12.0	12.3
OCONUS	N=31	N=128	N=135	N=73	N=21	N=108	N=496
Does not use child care ¹	30.6	23.0	21.5	22.6	33.2	22.0	23.1
Uses parental care ²	3.5	17.3	8.9	9.2	0.0	13.2	11.7
Uses non-parental care ³	69.5	77.0	78.6	76.1	66.9	79.0	76.9
Uses both parental & non-parental care ⁴	3.5	17.3	8.3	6.7	0.0	13.2	11.1

Includes all members who marked, "Not applicable, I have not used any of the following child care arrangements," and/or "None of the above (child care arrangements)" in the 1999 Survey of Active Duty Personnel.

²Includes all members who marked, "Child's other parent or stepparent" as their only, or one of several, child care arrangements.

³Includes all members who marked a non-parental care arrangement as their only, or one of several, child care arrangements.

Includes all members who marked both "Child's other parent or stepparent" and at least one non-parental care arrangement.

Next, we calculated the popularity of each specific type of child care arrangement using weighted data for CONUS and OCONUS populations; this information is shown in Tables 8a and 8b.

The most-used arrangement types were similar for CONUS and OCONUS families. The most popular forms of child care for each group were: friends/neighbors, grandparents, sitter/nanny/aupair, on-base CDCs, and parents, though the order of arrangements differed slightly across locations. For OCONUS fami-

Table 8a. Use of Specific Child Care Arrangements for CONUS and OCONUS Families

Arrangement Type	% Who Use			
	С	0		
Don't use child care	23.6%	23.1%		
Childs other parent/stepparent	14.2	11.7		
Brother or sister aged 15 or older	0.6	0.0		
Brother or sister under age 15	0.1	0.3		
Grandparent	24.8	13.8		
Other relatives	13.9	5.2		
Friend/Neighbor	37.4	40.0		
Sitter, nanny, aupair	17.1	21.8		
Preschool (on base)	5.5	9.7		
Preschool (off base)	10.2	4.5		
CDC (on-base)	18.9	36.0		
Child center/daycare center (off-base)	13.2	4.8		
Family child care home (on-base)	8.1	11.7		
Provider in a home setting (off-base)	9.2	4.8		
Federal program such as Head Start	0.6	0.8		

C=CONUS. 0=0CONUS. N=2,526 for CONUS families. N=496 for OCONUS families.

Table 8b. Most Popular Child Care Arrangements by Duty Location

CONUS Families	OCONUS Families		
1. Friends and neighbors (37.4%)	1. Friends and neighbors (40.0%)		
2. Grandparents (24.8%)	2. CDC, on-base (36.0%)		
3. CDC, on-base (18.9%)	3. Sitter/nanny/aupair (21.8%)		
4. Sitter/nanny/aupair (17.1%)	4. Grandparents (13.8%)		
5. Child's other parent (14.2%)	5. Child's other parent (11.7%)		
	5. FCC, on-base (11.7%)		

lies, on-base FCC was tied for fifth place with parental care. CONUS and OCONUS families were also similar in terms of the least-used forms of child care: siblings and federally supported programs such as Head Start.

There were some differences in child care arrangements between CONUS and OCONUS families. For example, compared to OCONUS families, CONUS families were:

- more than twice as likely to use 'off-base daycare centers,' 'other relatives' and 'off-base preschools'
- almost twice as likely to use 'grandparents' and 'off-base family care in a home setting'
- about half as likely to use 'on-base preschools' and 'on-base CDCs'

Child Care Arrangements by Paygrade (CONUS Families Only)

Because child care arrangements differ in cost, we anticipated differences among paygrades in child care usage. Between 19% and 34% of CONUS families did not use of any of the listed child care arrangements (including care by the other parent), with E3 and E5 reporting the highest and lowest amounts of non-usage, respectively. These data can be found in Table 9.

The most common types of child care arrangements were similar across paygrades, with 'friends or neighbors' being the most common (30.9-45.1%). The second most common form of child care, again across all paygrades,

was a grandparent (18.6 – 31.5%). The third most common form of child care was on-base care at a CDC for lower paygrades (13.6 – 20.6% for E3 – E5) and a sitter/nanny/aupair for higher paygrades (20 – 30.9% for O2 – O3). An off-base child day care center was the third most common type of care for paygrade E6 (20.1%).

Table 9. Child Care Arrangements for Military Families (CONUS) by Paygrade

ARRANGEMENT TYPE	E-3	E-4	E-5	E-6	0-2	0-3
	N=151	N=443	N=667	N=371	N=145	N=749
% of sample:	12%	32%	31%	14%	2%	9%
Don't use child care	33.6%	25.4%	19.2%	21.8%	24.1%	21.4%
Childs other parent or stepparent	10.6	16.3	15.2	11.7	12.0	13.2
Brother or sister aged 15 or older	1.0	0.4	0.7	0.9	0.0	0.5
Brother or sister under age 15	0.0	0.0	0.1	0.6	0.0	0.3
Grandparent	18.6	22.9	27.3	24.8	23.7	31.5
Other relatives	12.6	12.8	16.7	11.2	8.4	14.8
Friend/Neighbor	30.9	35.6	40.0	35.6	45.1	44.0
Sitter, nanny, or aupair	10.4	14.2	19.1	15.5	20.0	30.9
Preschool (on base)	2.9	5.1	6.5	6.6	5.3	6.0
Preschool (off base)	3.0	4.8	12.4	15.5	11.8	22.7
CDC (on base)	13.6	20.6	20.5	16.2	16.1	19.4
Child center/daycare center (off base)	9.3	9.4	14.8	20.1	10.8	16.1
Family child care home (on base)	6.2	8.7	9.6	7.1	6.1	5.3
Child care provider in a home setting (off base)	5.8	8.0	12.4	8.6	11.3	7.6
Federally supported program - Head Start	0.2	0.9	0.5	0.9	0.0	0.2

N=2.526 CONUS families.

Note. Figures in boldface indicate that a child care arrangement was in the top three for that column.

The least used forms of child care also were similar across paygrades. Federally funded programs such as Head Start, siblings, and on-base preschools and family child care homes were the least used forms of care. Across all paygrades, only 11% to 16% of families reported using parental care, and 8% to 17% reported using care by relatives other than parents, grandparents, or siblings. As discussed previously, we believe that care by other parent was under-reported. Off-base family care providers were used by only 6% to 12% of families.

When differences were found, families at higher paygrades seemed to use more costly forms of child care than families at lower paygrades, although families at higher paygrades also were more likely to report using grandparents, friends, and neighbors. For the most part, popularity of the following arrangements seemed to increase with paygrade:

- Sitter/nanny/aupair
- Off-base preschools
- Off-base daycare centers

As juggling care arrangements can be trying for any family, we were interested in how the complexity of care arrangements varies as a function of paygrade. To do this, the number of non-parental child care arrangements members reported using on a routine basis was calculated for individual families. Table 10 reports the results.

Military families reported the use of one non-parental child care arrangement most frequently. Across paygrades and locations, about one-half to two-thirds of families reported using zero or one non-parental care arrangement. There appeared to be a general trend where the number of arrangements per family increased with paygrade; the lowest paygrades (E3 and E4) appeared to use fewer types of child care arrangements and the highest paygrades (O2 and O3) appeared to use the greatest number of child care arrangements per child and per family.

Child Care Arrangements by Child Age (CONUS Families Only)

The regulations and accreditation standards for quality in child care are tightly related to the age of the children being cared for. Infants, for example, require more staff than older children. In contrast, older children have more demanding requirements for space and equipment for play than infants. Infant care costs more to deliver, and in the civilian world, fees charged to parents are set accordingly. The military child care system does not discriminate on the basis of child age. Table 11 summarizes the popularity of specific child care arrangements as a function of child age among families with a single child.

The use of no outside care arrangements was more popular for families with younger than with older children – it tied for most popular among families of infants. Group care settings, such as CDCs and preschool were also more popular among families with older children, while the families of infants relied primarily on informal forms of care such as friends, relatives, and sitters – note, however, that these informal forms of care were among the five most popular regardless of child age (keeping in mind that popularity is not an index of the intensity of use by individual families).

Table 10. Number of Non-Parental Child Care Arrangements Used by Military Families by Paygrade

NUMBER OF CHILD CARE ARRANGEMENTS	E-3	E-4	E -5	E-6	0-2	0-3
CONUS	N=150	N=443	N=664	N=371	N=145	N=749
*Average per child	1.69	1.78	1.93	1.76	1.81	2.08
*Average per family	1.78	2.05	2.31	2.19	2.13	2.60
0	34.9%	29.3%	20.2%	22.0%	24.2%	22.4%
1	35.9	30.5	26.0	31.7	26.9	21.1
2	14.7	20.6	23.9	21.0	23.6	19.9
3	9.6	11.2	17.1	12.3	15.9	17.2
4	4.3	4.3	7.6	8.2	7.9	10.1
5	0	2.8	3.7	2.3	1.0	7.6
6	0	0.8	1.0	1.8	0.6	1.3

^{*}Averages exclude families who use no non-parental child care. Thus, cell sizes for each paygrade are reduced by the percentage of families who report using zero non-parental child care arrangements.

Table 11. Child Care Arrangements for CONUS Military Families with One Child by Age of Child

ARRANGEMENT TYPE	UNDER 1	1 TO UNDER 2	2 TO 5		
	N=525	N=460	N=669		
Don't use child care	29.8%	18.2%	14.4%		
Childs other parent or stepparent	13.8	14.6	13.3		
Brother or sister aged 15 or older	0.2	0.8	0.5		
Brother or sister under age 15	0.0	0.2	0.2		
Grandparent	20.3	27.0	24.4		
Other relatives	12.0	16.1	11.8		
Friend/Neighbor	29.8	38.8	42.4		
Sitter, nanny, or aupair	13.2	20.4	20.0		
Preschool (on base)	3.2	3.3	10.3		
Preschool (off base)	3.3	5.9	15.8		
Child Development Center (on base)	14.2	21.3	26.3		
Child center/daycare center (off base)	7.6	13.2	13.5		
Family child care home (on base)	5.9	9.6	9.2		
Child care provider in a home setting (off base)	6.2	11.1	8.6		
Federally supported program - Head Start	0.2	0.8	1.1		

Note. Figures in boldface indicate that a child care arrangement was in the top three for that column.

Child Care Arrangements by Earner Status (CONUS Families Only)

For military members with one or two children under the age of six, who reported using at least one type of child care arrangement (n = 2,005), a little less than half (42%) lived in single-earner families; 58% lived in dual-earner families. Table 12 displays the percent of families in each category who use each type of care. As a side note, it is interesting that more than half (60%) of all single-earner CONUS families report using at least one type of non-parental child care arrangement, when conventional wisdom might suggest that single-earner families rely solely on the non-working parent to provide care

working parent to provide care. However, as we discuss below single-earners comprise a diverse group of configurations.

The most popular types of child care were the same for singleand dual-earner military families. As listed below, single- and dual-earner families had four of the top five child care arrangements in common. Single-earner families appeared only somewhat more likely to use parental care than dual-earner families, and on-base CDCs were about as popular among single- as dual-earner parents. This pattern was unexpected because one would assume that military families with only one employed parent would rely heavily on care by the other parent. Closer examination of single-earner families revealed, however, that 15% (n = 151) were single-parent families; 11% (n = 104) had spouses who attended school; and another

Table 12. Most Popular Child Care Arrangements by Earner Status

Single-Earner Military Families	Dual-Earner Military Families
1. Friends and neighbors (54.9%)	1. Friends and neighbors (44.8%)
2. Grandparents (36.3%)	2. Grandparents (29.9%)
3. Child Development Center, on-base (23.0%)	3. Child Development Center, on-base (25.9%)
4. Other parent (22.0%)	4. Sitter/nanny/aupair (24.2%)
5. Sitter/nanny/aupair (19.8%)	5. Child daycare center, off-base (22.4%)

19% (n = 158) included spouses currently seeking employment, all circumstances that reduce time available for parental care. In addition, 22% of dual-earner families (n = 264) had spouses who worked only part-time, leaving more time available for parental care. In addition, although they were equally popular, it is possible that nonparental child care arrangements were used less intensely (i.e., for fewer hours) than parental care by single- than dual-earner families, but the available data do not permit us to examine this possibility.

Beyond the most popular arrangements, there were notable differences between single- and dual-earner families in the popularity of specific arrangements. Compared to single-earner families, dual-earner families were: almost twice as likely to use 'on-base FCC' and over twice as likely to use 'off-base day care centers' and off-base family day care'

Perhaps dual-earner families were more likely than single-earner families to use these more formal sources of child care arrangements because they needed more care overall, and more reliable care than less formal arrangements (e.g., friends and neighbors) might provide. Dual-earner families also may have been more able to afford these costly forms of child care.

Single- and dual-earner families were alike in their least popular forms of child care arrangements, which again, were siblings and Head Start.

Child Care Arrangements by Housing Location (CONUS Families)

The housing in which families live may affect the accessibility of various child care options. Families who live in military housing may find it easier to use on-base child care arrangements than families who live in civilian housing, for example. Table 13a summarizes the popularity of specific child care arrangements as a function of housing location.

Table 13a. Child Care Arrangements for Military Families by Housing Location

	% WHO USE				
ARRANGEMENT TYPE	MILITARY HOUSING	CIVILIAN HOUSING			
	N=938	N=1,588			
Don't use child care	26.8	21.3			
Childs other parent or stepparent	13.2	15.0			
Brother or sister aged 15 or older	0.3	0.9			
Brother or sister under age 15	0.2	0.1			
Grandparent	20.6	27.8			
Other relatives	12.4	14.9			
Friend/Neighbor	42.0	34.0			
Sitter, nanny, or aupair	15.2	18.5			
Preschool (on base)	8.0	3.7			
Preschool (off base)	8.0	11.9			
Child Development Center (on base)	24.0	15.3			
Child center/daycare center (off base)	6.9	17.7			
Family child care home (on base)	11.0	6.0			
Child care provider in a home setting	4.7	12.4			
(off base)					
Federally supported program -	1.1	0.2			
Head Start					

N=2,526 CONUS families

Housing location does appear to be associated with the type of child care arrangements military families use. Although these two groups of families used similar numbers of arrangements overall (averaging 1.70 for military-housed families and 1.81 for civilian-housed families), and shared four of the top five most used child care arrangements, differences were apparent (see Table 13b). In general, military-housed families seemed to rely more heavily on friends and neighbors and on-base CDCs, and less heavily on grandparents, than their civilian-housed counterparts.

Table 13b. Most Popular Child Care Arrangements by Housing Location

Table 135. Mosel opular clina care / mangements by Housing Education								
MOST USED CHILD CARE ARRANGEMENTS								
MILITARY HOUSING	CIVILIAN HOUSING							
1. Friends and neighbors (42.0%)	1. Friends and neighbors (34.0%)							
2. Child Development Center on-base (24.0%)	2. Grandparents (27.8%)							
3. Grandparents (20.6%)	3. Sitter/nanny/aupair (18.5%)							
4. Sitter/nanny/aupair (15.2%)	4. Daycare center off-base (17.7%)							
5. Child's other parent (13.2%)	5. Child Development Center on-base (15.3%)							

Compared to civilian-housed families, military-housed families were:

- over a third more likely to use on-base CDCs
- almost twice as likely to use on-base FCC
- less than half as likely to use an off-base daycare center or family care home

These differences in care could be due to the convenience of child care location. Perhaps living on-base gives military families an advantage in accessing the military's high-quality child care. This explanation seems likely, as later results will show that more civilian-housed members report being dissatisfied or very dissatisfied with the acceptability and affordability of their child care compared to military-housed members.

What Do Military Parents of Preschoolers Spend on Child Care?

Data from the 1999 Survey of Active Duty Personnel were used to assess monthly child care costs. Members were asked, "What is the total amount that you spent last month on child care arrangements for all of your children?" Members were given a space to write the actual dollar amount, or they had the option of responding, "Does not apply, I spent no money on child care arrangements last month." Responses were grouped by the Defense Manpower Data Center into 7 categories; Table 14 displays the distribution of responses across the categories. The table shows that about 30% of military families with children younger than six reported spending \$200 or less per month, or about \$50 per

week. About 40% of families reported spending between \$200 and \$400 per month, or up to about \$100 per week, and about 20% of families reported spending over \$400 per month, up to \$800 or more.

A surprisingly high proportion of families (39.3%) reported paying nothing for child care, even though almost half of those families (43.4%) used care. Some parents might receive care at no charge because they receive or exchange care as a favor, because they are care providers themselves and care for their own children along with others, or because they use only very small amounts of care.

Child Care Expenditures by Type of Care

Table 15 displays the percent of families using each type of child care who pay for one or more of the forms of child care they use. As the table shows, families relying on grandparents, other relatives, and friends and neighbors were least likely to be report paying for care, with per-

Table 14. Distribution of Monthly Expenditures

CHILD CARE	
SPENDING PER MONTH	% OF ALL FAMILIES WHO PAY
\$1-100	17.4%
\$101-200	15.0
\$201-300	23.8
\$301-400	20.9
\$401-500	9.4
\$501-800	10.4
\$801 or more	3.0

centages ranging from 23.5% (grandparents) to 45.9% (other relatives). Families most likely to report paying for care were those using homebased child care providers off base (97%), CDCs (91.5%), and FCCs (91.3%).

Table 16 displays parents' average expenditures for child care type of care. For each type of care presented, results are shown for all families who used that type of care as well as for families who used only that type of care. The number of families used in the calculation of each mean is shown in parentheses below the mean. Comparing the numbers of families used for the two different versions of each mean emphasizes that most families used more than a single form of care. Comparing the means for parents who used multiple and single arrangements provides a rough estimate of parents' expenditures for care beyond the arrangement in question.

Military parents spend similar amounts on offbase center care and family child care; they tend to spend more for care in on-base FCCs than CDCs.

Table 15. Percent of Families Who Pay for Care by Type of Arrangement

ARRANGEMENT TYPE	% FAMILIES USING THIS CARE WHO PAY FOR SOME FORM OF CHILD CARE
Childs other parent or stepparent	19.2%
Brother or sister aged 15 or older	0.0
Brother or sister under age 15	0.0
Grandparent	23.5
Other relatives	45.9
Friend/Neighbor	45.7
Sitter, nanny, or aupair	81.9
Preschool (on base)	54.5
Preschool (off base)	70.9
Child Development Center (on base)	91.5
Child center/daycare center (off base)	84.6
Family child care home (on base)	91.3
Child care provider in a home setting (off base)	97.3

Note. If using multiple care arrangements, the data did not all us to determine if they were actually paying for each specific type of care.

In general, families using multiple forms of care spend more than families using only a single form of care, by between \$10 and \$130, on average. This represents less than half the amount of the overall care bill, suggesting that the other forms of care are secondary or backup sources.

Table 16. Average Monthly Child Care Spending by CONUS Military Families (Number of Families Reporting)

CARE ARRANGEMENT	ALL FAMILIES WHO USE THIS CARE (# REPORTING)	FAMILIES WHO RELY SOLELY ON THIS CARE (# REPORTING)
Childs other parent or stepparent	\$301 (290)	na
Grandparent	\$310 (512)	na
Other relatives	\$302 (261)	na
Friend/Neighbor	\$282 (899)	\$190 (81)
Sitter, nanny, or aupair	\$303 (602)	\$271 (59)
Preschool (on base)	\$278 (176)	na
Preschool (off base)	\$348 (338)	\$260 (39)
Child Development Center (on base)	\$311 (623)	\$328 (143)
Child center/daycare center (off base)	\$383 (368)	\$352 (77)
Family child care home (on base)	\$343 (247)	\$345 (47)
Child care provider in a home setting (off base)	\$382 (260)	\$353 (61)

na - based on fewer than 10 cases. Care by siblings is omitted from the table because less than 10 families total used it. Note. Families who use multiple forms of care are represented in multiple cells of the table.

Child Care Expenditures by Paygrade and Family Type

Table 17 summarizes the average amounts spent on child care by groups of families defined by paygrade, number of children, housing location, and earner status. Not surprisingly, families with two children tended to spend more on child care than families with one child, particularly when both parents were employed. In addition, families living in civilian housing appeared to spend some-

what more on child care than families living in military housing. Among single earner families, officers tended to spend less than enlisted members on child care, probably because they were more likely to have spouses who were homemakers (and thus more available for child care) and less likely to have spouses who were unemployed (i.e., looking for work). The reverse was true among dual-earner families: officers in those families tended to spend more than enlisted members on child care.

Table 17. Monthly Spending on Child Care by Family Type Across Paygrades

Table 17. Monthly Spending on Child Care by Family Type Across Payglades									
FAMILY TYPE	PE E-3		E-5	E-6	0-2	0-3			
MILITARY HOUSING									
1 child 1 earner	\$194	\$247	\$197	\$209	\$89	\$152			
2 children 1 earner	na	192	208	260	164	141			
1 child 2 earners	246	293	314	340	na	370			
2 children 2 earners	na	371	398	413	338	399			
CIVILIAN HOUSING									
1 child 1 earner	na	270	305	277	201	146			
2 children 1 earner	na	na	220	224	na	198			
1 child 2 earners	308	280	328	367	352	397			
2 children 2 earners	na	421	506	506 517		459			
OVERALL									
1 child 1 earner	228	259	242	253	152	149			
2 childen 1 earner	na	213	213	238	152	171			
1 child 2 earners	281	286	323	358	329	392			
2 children 2 earners	na	392	456	490	na	442			

na = Fewer than 10 cases.

Note. These numbers represent actual costs of child care regardless of the type or amount of child care families use. Only families who pay for care are included in the calculation of means.

CHILD CARE USE AND SATISFACTION AMONG MILITARY FAMILES WITH PRESCHOOL CHILDREN	

SECTION 4

How do Military Parents of Preschoolers Evaluate Child Care?

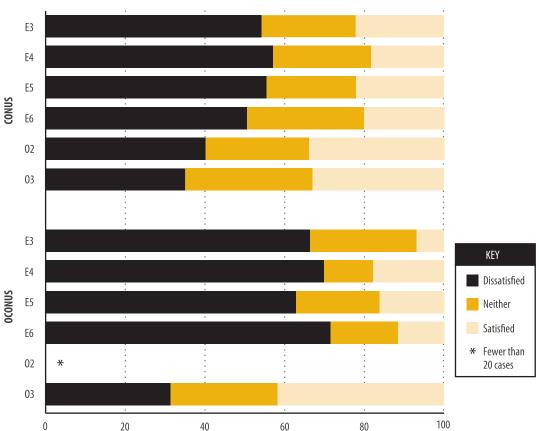
How do Military Parents of Preschoolers Evaluate Child Care?

The available evidence regarding military parents' feelings about their child care is more anecdotal than empirical. As a result, we took advantage of the resources in the Active Duty Survey to examine parents' responses regarding their satisfaction with child care, their reasons for changing child care arrangements, and their concerns about child care while separated from their families.

Satisfaction

Members were asked, "How satisfied are you with each of the following?" followed by a list of 37 items. The last item on the list was "Acceptable and affordable child care." Members could choose one of five different responses where 1 = Very satisfied and 5 = Very dissatisfied or indicate that the question did not apply. Figure 6 summarizes the results.

The terms "acceptable and affordable" might hold many different meanings for military parents. For example, acceptable care might mean care that is offered during convenient hours, available in good supply, or of good quality. Affordable care might mean care that is available for what members feel they can pay, or what members feel they should pay. Parents might answer with reference only to child care offered by the military or to child care in general.



 $Figure \ 6. \ Members' \ Evaluations \ of the \ "Acceptability \ and \ Afford ability \ of \ Child \ Care"$

Note. Satisfied includes both "very satisfied - 1" and "satisfied - 2"; Dissatisfied includes both responses "very dissatisfied - 5" and "dissatisfied - 4"

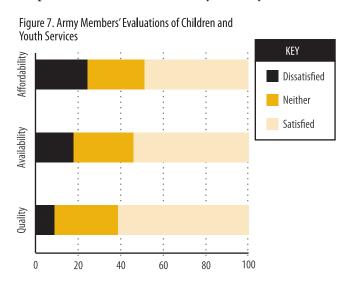
Overall, enlisted members appeared to be somewhat less satisfied than officers with the acceptability and affordability of child care. As the figure indicates, more than half of enlisted members reported being very dissatisfied or dissatisfied. Fewer officers reported such strong dissatisfaction with child care (40% or less), and more reported being satisfied or very satisfied (slightly more than 30%) with child care. This pattern held for members stationed both in CONUS and OCONUS. Across paygrades, 22% to 32% were neither satisfied nor dissatisfied with child care.

Given positive reviews of the military child care system (Campbell et al., 2000) and the high percentages of military centers and homes that meet national standards of excellence, the high levels of dissatisfaction reported by members were surprising. Unfortunately, the relevant item on the Active Duty Survey was double-barreled, asking in a single question about both the acceptability and the affordability of care. Thus, it is impossible to determine using this data set how much of respondents' dissatisfaction springs from issues of acceptability and how much from affordability. The wording of the question also did not ask respondents to draw distinctions among their past, current or preferred forms of care.

Once again, we looked to data gathered by the military services for clues about parents' assessments of child care. So that we could separate issues of acceptability from those of affordability, we focused first on items that asked parents to indicate their satisfaction with child care 'overall' or with child care 'quality.' Across the services, military members and/or spouses tended to report high overall satisfaction with child care. For example, in the 1998 Quality of Life survey, Marines rated their satisfaction with "overall child care" 5.8 out of 7, on average (White,

Baker & Wolosin, 1999). Over 60% of the Army spouses who responded to the 2000 Survey of Army Families (SAF IV) and whose dependent children used Army Children's Youth Services reported satisfaction with the quality of child care (Peterson, 2000).

Service data also suggest that affordability of child care is a greater concern for military members than acceptability. For example, despite their high satisfaction with child care overall, Marines in 1998 reported average satisfaction with cost of only 4.5 out of 7 (White et al, 1999). In the SAF IV, slightly more than half of Army spouses indicated satisfaction with availability of care, but slightly less than half reported satisfaction with affordability (see Figure 7). In the 2000 Navy-wide Personnel Survey, approximately 35% of the respondents reported using Navy child care services and about five in six of those indicated satisfaction with those services (Olmsted, 2001). In the Air Force 1999-2000 Community Needs Assessment, over 80% of parents indicated satisfaction with aspects of care such as location, staff-child interactions, safety, equipment and meals, but less than 50% said they were satisfied with the cost of care (see Figure 8) – similar to the levels of satisfaction reported on the Active Duty Survey.



Note. Satisfied includes both "very satisfied - 1" and "satisfied - 2" Dissatisfied includes both responses "very dissatisfied - 5" and "dissatisfied - 4"

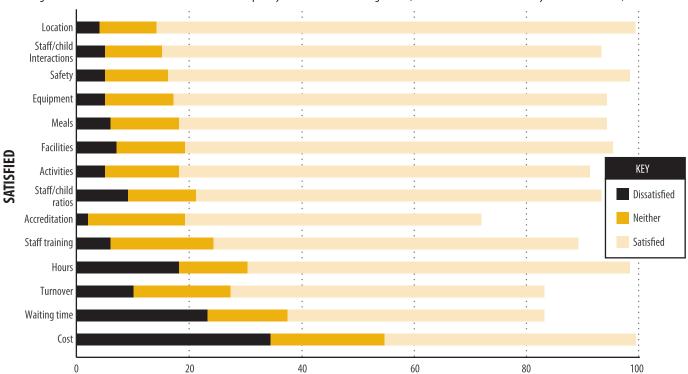
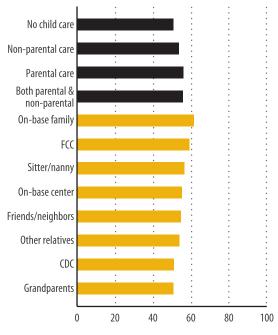


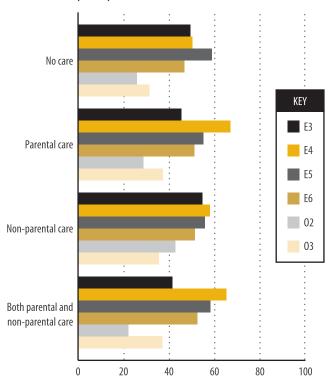
Figure 8. Air Force Members' Evaluations of "Most Frequently Used" Child Care Arrangement (Air Force 1999-2000 Community Needs Assessment)

Figure 9. Percent Reporting Being Dissatisfied or Very Dissatisfied by Type of Care Used (1999 Active Duty Survey)



Note. Most families used multiple types of care; dissatisfaction is reported as overall level

Figure 10. Percent Dissatisfied or Very Dissatisfied by Paygrade and Category of Care (1999 Active Duty Survey)



Note. The bottom three sets of bars are not mutually exclusive; the same family may appear multiple times.

Table 18. Responses to Questions About Child Care Concerns From the 1999 Survey of Active Duty Personnel

Child Care Concern Variables	Response	E3	E4	E5	E 6	02	О3
		%	%	%	%	%	%
#F	Serious problem	21.4	23.3	20.1	12.2	20.5	9.9
"For your most recent PCS move, was availability of child care a problem?"	Somewhat/Slight problem	38.9	39.6	38.3	44.0	28.2	40.9
availability of Child Care a problem:	Not a problem	39.7	37.1	41.6	43.8	51.3	49.3
"During the past 12 months, have child care arrangements been a concern while you were away?"	Yes	34.4	44.1	44.8	40.4	36.4	33.1
"During the past 12 months, did you lose any time from your military duties (work, school, or training) due to a change in child care arrangements?"	Yes	36.5	44.1	44.7	35.9	23.3	31.2

Note. CONUS families only (n = 1,693)

Child Care Satisfaction by Type of Child Care Arrangement (CONUS Families)

As Figure 9 indicates, levels of dissatisfaction with the acceptability and affordability of child care were relatively high, both for categories (e.g., parental versus non-parental) and specific types of care (e.g., grandparents versus on-base CDC). The lowest levels of dissatisfaction were associated with care in CDCs and by grandparents; families using off-base FCC as one of their arrangements were most likely to report dissatisfaction.

There appeared to be small differences in satisfaction levels between paygrades for the different categories of care used. Figure 10 indicates that officers were less likely than enlisted members to report dissatisfaction, and that enlisted members in paygrades E3, E4 and to a lesser extent E5 were most likely to report dissatisfaction.

Concerns with Child Care Arrangements (CONUS Families Only)

Members were asked several questions regarding possible concerns about child care during separations and permanent changes of station. Responses are summarized in Table 18.

In general, members in lower paygrades reported more concern with child care availability during PCS moves than members in higher paygrades. Members were asked, "For your most recent PCS move, were any of the following a problem? Answer even if this is your first assignment." Members could choose one of four different responses where 1 = Seriousproblem and 4 = Not a problem or indicate that the question did not apply. Following was a list of 26 items, the last of which was, "Availability of child care." Almost one-third of the sample (32%) marked that this question did not apply to their situation. Of the 1,693 parents who felt it was applicable, 10% to 23% of members across all paygrades reported that availability of child care was a serious problem; the lowest paygrades seemed

to be most concerned. Higher paygrades (E6 and O3) reported the lowest frequencies of serious concern, but they reported the highest frequencies of somewhat/slight concerns with child care availability. We speculate that higher paygrades have the least concern with child care availability because members at these paygrades can afford to purchase the full spectrum of child care.

Overall, members in lower paygrades appeared to have somewhat greater concerns regarding child care arrangements while they were away from their families than did members in higher paygrades. Members were asked, "During the past 12 months, have any of the following been a concern while you were away? (mark all that apply.)" Following was a list of 20 potential concerns, the tenth of which was, "Child care arrangements." Only 77% of the sample (n = 1,947) completed this item because it was not applicable if parents had not been away within the last 12 months. Of the parents who completed this item, most (59%) were not concerned about child care arrangements. Again, lower paygrades (E4 and E5) reported the highest frequencies of concern, whereas higher paygrades (O2 and O3, with the addition of E3) reported the lowest frequencies.

In general, changes in child care arrangements were perceived as disrupting military duties somewhat more for lower paygrades than they did for higher paygrades. Members were asked, "During the past 12 months, did you lose any time from your military duties (work, school, or training) due to a change in child care arrangements?" and could respond, "Yes" or "No." Less than half of the parents (n = 1,010) completed this item as only 47% of the sample experienced a change in child care arrangements. Of those who did, between 30 and 45% had lost time from military duties because of changes in child care arrangements. E4 and E5 members were most likely, and O2 and O3 members least likely, to report having lost duty time.

Table 19. Satisfaction With Child Care by Member Characteristics

Characteristic	Satisfied	Dissatisfied
SEX	%	%
Male	20.4	51.6
Female	28.2	59.7
SERVICE		
Army	21.4	56.9
Navy	25.8	48.2
Marine Corps	20.1	54.5
Air Force	19.6	52.4
Coast Guard	20.1	52.2
JOB STATUS		
Second Job	13.7	61.5
No second job	23.3	51.5
EDUCATION		
High school diploma	20.4	55.5
< 1 year college	19.1	57.2
> 1 year college, no degree	23.5	51.6
Associate degree	15.2	59.5
Bachelors degree	28.8	42.5
Graduate degree	34.2	35.3
ETHNICITY		
Hispanic	25.9	51.3
White, not Hispanic	19.9	53.5
Black, not Hispanic	27.6	49.5
All other races, not Hispanic	22.3	62.0

Sat.="Satisfied with child care." Dis.="Dissatisfied with child care."

Child Care Satisfaction and Characteristics of Military Members (CONUS Families Only)

In a further effort to understand patterns of satisfaction and dissatisfaction with child care, we examined the characteristics of individual military members. The results are shown in Table 19.

SEX. Female members were more likely than male respondents to report both satisfaction and dissatisfaction with child care, indicating that females were more likely to have an opinion about child care.

SERVICE. In terms of military service, members of the Navy appeared to be less likely to report dissatisfaction than members of the other services.

JOB STATUS. Military members who held a second job in addition to their military duty appeared to be more dissatisfied with child care than members who did not.

EDUCATION. Education also seemed to be related to levels of child care satisfaction: Members with a least a 4-year college degree reported dissatisfaction with child care less often than their less-educated counterparts.

ETHNICITY. Regarding ethnicity, Black and Hispanic members appeared to be the most satisfied and least dissatisfied with the acceptability and affordability of child care.

Child Care Satisfaction and Characteristics of Military Families (CONUS Families Only)

We also undertook a more detailed analysis of the characteristics of military families in an effort to understand other correlates of dissatisfaction with child care. Patterns of satisfaction were scanned for differences across paygrades according to several descriptive and demographic variables of interest. Percentages are reported in Table 20.

MARITAL STATUS. Unfortunately, only the middle paygrades (E4 through E6) had enough single parents to compare child care satisfaction with that of married parents. For paygrades E5 and E6, single parents were more likely to report satisfaction than married parents; there were no differences by marital status for paygrade E4.

NUMBER OF EARNERS. In general, there appeared to be very little difference in child care satisfaction between single- and dualearner families across paygrades. Interestingly, when there was a difference, members from dual-earner families were more satisfied and/or more dissatisfied than members from single-earner families. In other words, members from dual-earner families were more likely to have an opinion about child care than members from single-earner families. For both dual-earners and single-earners, officers were more likely to report satisfaction than enlisted members.

NUMBER OF PRESCHOOL CHILDREN.

For all paygrades except E3 and O3, members with two preschool-aged children appeared more dissatisfied with child care acceptability and affordability than members with one preschoolaged child. For O3, parents were similarly dissatisfied; there were too few E3 families with two preschool-aged children for comparison.

HOUSING LOCATION. O2 members living on-base seemed to be less satisfied than members who lived off-base; this pattern was reversed for the lowest paygrade (E3). Levels of satisfaction among the remaining paygrades (E4, E5, and E6) seemed to be similar regardless of housing location.

FINANCIAL STRAIN. Members who reported high financial strain also tended to report relatively low satisfaction with child care; the opposite was true for families reporting low financial strain. As Table 20 indicates, dissatisfaction with child care was positively related to financial strain in all paygrades except O2. For O2 members, families under moderate strain were more than twice as likely to report dissatisfaction than the families under more severe strain.

Table 20. Satisfaction With Child Care by Paygrade and Family Characteristics

	E	3	E	4	E	5	E	6	C	2	O)3
	Sat.	Dis.										
MARITAL STATUS												
Not married	na	na	18.4	48.3	35.1	42.9	32.0	52.5	na	na	na	na
Married	23.2	53.4	18.3	58.1	21.2	56.4	19.4	50.3	33.2	41.8	32.9	34.7
EARNERS												
Single	15.9	52.4	18.3	49.2	20.5	53.0	18.7	43.9	29.8	39.4	33.1	31.0
Dual	29.0	55.8	18.4	64.7	23.2	56.9	21.3	55.1	38.5	42.4	33.0	39.6
NUMBER OF PRESCHOOLE	RS											
1	23.1	50.1	20.6	54.2	22.2	52.9	22.4	48.3	34.8	38.0	30.3	35.7
2	na	na	12.6	64.2	22.1	60.4	16.7	54.0	32.5	46.0	46.6	34.1
HOUSING												
Military	29.6	49.5	19.5	57.7	21.9	56.9	19.3	51.0	27.5	45.3	38.6	34.7
Civilian	15.9	58.0	17.1	56.2	22.4	54.4	20.7	50.2	37.5	38.4	30.6	35.2
FINANCIAL STRAIN												
Low	35.2	41.2	29.1	53.6	25.7	54.9	27.4	38.0	41.6	34.0	37.8	31.1
Mod	26.5	43.8	17.2	55.3	22.8	51.9	17.8	58.5	16.8	61.3	24.1	44.6
High	10.9	68.8	13.7	62.0	16.5	61.3	11.1	62.0	27.6	26.7	17.9	42.4
NUMBER OF CHILD CARE ARRANGEMENTS												
0	27.2	49.3	9.3	49.8	16.8	59.2	21.3	46.8	na	na	23.0	30.0
1	19.4	54.4	22.7	58.0	20.7	52.8	16.4	51.4	41.9	36.0	35.0	35.4
2	6.9	58.2	14.9	56.3	30.7	49.2	19.9	41.6	21.4	57.0	34.1	33.5
3	na	na	25.5	65.8	22.2	59.1	23.5	53.7	na	na	34.4	36.8
4	na	na	17.4	67.3	21.8	66.9	18.6	69.4	na	na	37.4	32.1
5	na	na	na	na	14.0	47.0	na	na	na	na	33.5	37.0

Sat.="Satisfied with child care." Dis. ="Dissatisfied with child care."

na=Fewer than 20 cases.

		,			,				
	% With Infants	% With Children Under 5 Away	% In Civilian Housing	% Single Earner	% Single Parent	% Minority	% Female	% Who Don't Spend	% Who Don't Use Care
E3	54.7	9	54	57	10	49	27	30	34
E4	36.5	7	44	51	10	38	22	41	25
E5	29.3	5	55	45	6	39	13	29	19
E6	24.9	5	63	48	6	34	8	38	22
02	40.7	3	60	62	2	26	13	35	24
03	36.8	1	66	62	1	15	10	32	21
All	35	5	54	51	7	36	16	35	24

Table 21. Characteristics Potentially Related to Levels of Child Care Dissatisfaction Among Junior Enlisted Members

NUMBER OF CHILD CARE ARRANGE-MENTS. There did not seem to be any clear pattern of child care satisfaction by the number of child care arrangements (including parental care) for these paygrades.

As one more way of trying to understand possible reasons for the relatively low levels of satisfaction among junior enlisted members, we examined the prevalence of a number of characteristics that may present challenges for child care or for life in general. As the highlighting in Table 21 shows, E3 and E4 families with preschool children were disproportionately likely – willingly or unwillingly – to face a number of challenging circumstances. For example, these members were disproportionately likely to:

- be single parents;
- be female:
- have infants:
- live off-base;
- have children who did not live with them; or
- members of racial or ethnic minority groups.

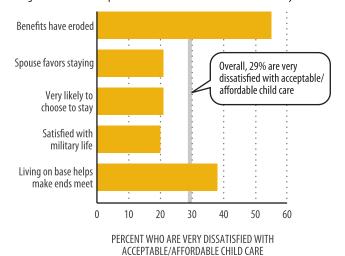
Despite their apparent need, these families were also among the least likely to report using and/or paying for child care.

Attitudes Potentially Related to Evaluations of Child Care

'Entitlement' is an issue that features prominently in many informal discussions of military parents' feelings about child care. To the extent that military parents believe they should receive child care as a no-cost part of their military benefits, they may be predisposed to dissatisfaction with care they must pay for, even when subsidized. To test this hypothesis, we examined the relationship between parents' levels of satisfaction and several other attitudes about military life; the results are shown in Figure 11.

Overall, 29% of the sample expressed strong dissatisfaction with the acceptability and/or affordability of childcare. Dissatisfaction was more common among members who strongly agreed that benefits had eroded and members who lived off base but believed that living on base would help make ends meet. Dissatisfaction was less common among members who reported that they were very likely to stay in the military or that their spouses strongly favored staying, or who were very satisfied with military life.

Figure 11. Relationship Between Child Care Satisfaction and Military Attitudes



SECTION 5

Discussion

The purpose of this report was to describe the child care arrangements that military parents of preschoolers use, how much they spend, and how they evaluate their arrangements. As readers consider the implications of our results, the following limitations and strengths of the analyses should be kept in mind.

Strengths and Limitations of the Analyses

Although the databases used for this study contained many thousands of cases (e.g., the 1999 Active Duty Survey was administered to more than 60,000 respondents), analysis groups became quite small once divided by paygrade, number of earners, and number and ages of children. This limits the precision of findings and prevented separate analyses for each armed service or for families with infants and toddlers.

Available military data contained no information about the number of hours particular child care arrangements were used or the cost of specific arrangements. Furthermore, most data came exclusively from military members (vs. spouses), regardless of whether or not they were the parent primarily responsible for making and monitoring arrangements for child care.

Some military members may have mistakenly understood "child care" to exclude care by parents and failed to respond appropriately to items in the 1999 Active Duty Survey. As a result, these findings may underestimate the use of some child care arrangements.

The results presented in this report were not tested for statistical significance because of biases introduced by large sample sizes and variations in levels of analysis and design effects across data sources. Instead, we focused on identifying meaningful patterns indexed by large and consistent differences among groups.

Many of the key findings in this report come from responses to an item on the 1999 Active Duty Survey that asked military members what type(s) of child care arrangements they had used in the past year on a "routine" basis. No information was gathered about how many hours each type of arrangement was used, which arrangements were used for specific children in their family, or the cost of particular arrangements.

Key Findings

Most military families with children younger than six (over 60%) rely on non-parental care at least some of the time, regardless of the number of earners or parents in the family, and regardless of being stationed CONUS or OCONUS. An unexpectedly high percentage of military parents reported using no child care at all, even by the other parent. This may be due to under-reports of parents' provision of child care in the 1999 Survey of Active Duty Personnel.

Military families who use non-parental care rely on both formal (e.g., on- and off-base child care centers) and informal (e.g., grandparents, friends, and neighbors) types of care arrangements. When a formal care arrangement is used, it is most often an on-base CDC. This pattern holds regardless of location (CONUS, OCONUS) or the number of earners in the family. This pattern also holds regardless of paygrade except that officers are more likely to rely on sitters or nannies than center-based care.

Military parents are more likely than their civilian counterparts to use center-based care, suggesting that the military has done a good job of making it attractive and accessible. Infant care is often in especially tight supply in the civilian sector, making military efforts in this area especially important. Like civilians, however, military parents are less likely to use formal arrangements such as centers or group care homes on or off base than informal arrangements such as friends, neighbors, relatives, or sitters. This pattern holds regardless of duty location or the number of earners in the family. No data are available regarding how frequently parents use any particular type of care, or for how many hours. Thus, it is impossible to know which types of care are primary and which are used for small amounts of "fill-in" care. In addition, available data do not make it possible to assess the fit between the care parents now use with the care parents would most prefer to use.

A surprisingly high proportion of families reported using care by friends, neighbors and relatives. Friends and neighbors were used by more families than any other single child care arrangement, regardless of the number of earners in the family or duty location (CONUS, OCONUS). By at least one estimate, military members are as likely as civilians to rely on grandparents for routine child care. This finding was unexpected because the duty locations and frequent moves of military members presumably prevent them from living close to family. Data from the Army suggest that friends, neighbors and relatives were key sources of secondary or occasional care, used by most families for less than 2 hours per week, while group care arrangements such as CDCs were key sources of primary or usual care. Families experiencing longer periods of separation because of military duties were more likely to rely on care by grandparents, friends and neighbors, sitters, and off-base child care centers.

The data reported here show that child care arrangements are complex for military families who use care: among parents who use non-parental care, 45% are managing between two and six types of regular care arrangements. Like civilians, military families with children younger than six use an average of about two child care arrangements per child at any one time. The most common combinations of care arrangements include friends and neighbors, grandparents, or sitters.

Military children experience somewhat more frequent changes in their care arrangements than civilian children. Depending upon paygrade, between 41% and 50% of military families with children younger than six changed child care arrangements in the year prior to the 1999 Active Duty Survey. In contrast, less than one-third (32%) of civilian parents of children younger than six had used more than one arrangement. Instability in children's care arrangements increases the importance of well-trained, sensitive and responsive child care providers. Cost was a more common reason for changing child care arrangements among families with lower incomes.

In terms of expenditures for child care, about 30% of military families with one or two children younger than six report spending \$200 or less per month; about 20% spend more than \$400 per month. A surprisingly high proportion of families (39.3%) reported paying nothing for child care, even though 43% of those families used care – though probably in very small amounts. CONUS families living in civilian housing consistently reported spending more for child care than families living in military housing. Dual-earner families reported spending more on care than single-earner families, perhaps because they were much more likely to use non-relative care than single-earner families. Families with two children reported spending more on child care than

families with one child. With regard to onbase arrangements, families reported spending more for FCCs than CDCs.

Military members were asked how satisfied they were with "acceptable and affordable" child care, terms that might hold many different meanings. Overall 29% of the respondents reported that they were very dissatisfied with acceptability and/or affordability. There are no data to suggest whether such dissatisfaction centers on arrangements used in the past, current arrangements, or arrangements parents would prefer to use. Data from individual military services suggest, however, that satisfaction with child care is generally high, and that dissatisfaction is more likely to center on affordability rather than acceptability.

Dissatisfaction was more common among enlisted and OCONUS members than among officers and CONUS members. Dissatisfaction was more common among members using off-base family child care than those using CDCs and grandparents. In terms of individual characteristics, members were less likely to report dissatisfaction when they were collegeeducated, in the Navy, Black or Hispanic, or did not hold a second job. In terms of family characteristics, no prominent relationships were observed between satisfaction and housing location, number of earners or number of child care arrangements. Dissatisfaction was more common among respondents who strongly agreed that military benefits have recently eroded and respondents who did not live on base but believed that doing so would help make ends meet. Dissatisfaction was less common among respondents who reported that they were very likely to stay in the military, who reported that their spouses strongly favored staying, and who were very satisfied with military life.

CHILD CARE USE AND SATISFACTION AMONG MILITARY FAMILES WITH PRESCHOOL CHILDREN						

SECTION 6

Future Directions

Future Directions

Although considerable information has already been gathered by the Department of Defense and individual military services, important gaps remain in our understanding of the child care situation facing military parents of children younger than 6. These gaps occur because of unforeseen errors that parents make in completing surveys, because of pressures to be efficient in designing surveys that result in items that turn out to be ambiguous, or information that survey designers determine is not sufficiently relevant, important, or succinct to be included. But the gaps are important and should be filled because they will reveal the full complexity of the arrangements military families make; complexity only hinted at in the current report. Unanswered questions that should be addressed include the following:

How are children cared for in families that report not using any child care arrangements?

Which arrangements (including military and non-military, formal and informal, paid and unpaid arrangements) are used for which children, for how many hours, when and at what cost?

How do the arrangements that parents are using and paying for compare to what parents would prefer to use and pay?

Levels of dissatisfaction with child care appear to be quite high according to the Active Duty Survey, but other data suggest that dissatisfaction is mostly associated with issues related to affordability. In turn, satisfaction is related to key military outcomes such as satisfaction with military life and both spouses' and members' willingness to stay. Again, there are substantial gaps in the available data on this issue. Better understanding is needed about the factors that produce satisfaction and flow from it. For example, no DoD-wide data are available that document parents' satisfaction with a consistent set of specific aspects of their child care arrangements, such as schedule, program quality, affordability, availability of slots, and location. In addition, data currently available regarding changes in child care do not document which forms of care the reason

for changing drove parents to versus away from. Longitudinal data would make it possible to determine whether satisfaction with child care leads to or results from satisfaction with other aspects of military life.

Anecdotal evidence suggests that military parents are dissatisfied with child care when they must pay for it because they believe they are entitled to care at no cost. Findings in this study are consistent with this perception, but the available data did not deal specifically with perceptions of entitlement to child care, only with erosion of military benefits in general. Better understanding of the "psychological contract" military members perceive themselves as having entered into with the military could improve the ability to design and market programs and services that military families would perceive as beneficial.

Several findings in this report hint that families facing challenges in other areas – such as low resources – are especially likely to report difficulty and dissatisfaction with child care. These are also the families least likely to report using child care. Additional data and analyses are needed to determine the sources of financial strain among these families and what if anything can be done, and also to understand how children are cared for.

SECTION 7

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SECTION 8

Appendices

GLOSSARY OF ACRONYMS

ВАН	Basic Allowance for Housing				
CDC	Child Development Centers				
CES	Consumer Expenditure Survey				
COLA	Cost-of-Living Allowance				
CONUS	Continental U.S.				
DoD	Department of Defense				
FCC	Family Child Care Program				
MC&FP	Office of Military Community & Family Policy				
OCONUS	Outside the Continental U.S.				
PCS	Permanent Change of Station				
RMC	Regular Military Compensation				
SAC	School Age Care				





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